

TECHNICAL ADVISORY T1-07

CODE and SECTION: IBC 2006 – Section 1613.1

COMMON NAME: Suspended Ceilings (Seismic)

Date: July 24, 2007

Name of Requestor: Mr. Ken McNeil

Title and edition of the model code and code section(s) to be considered for the code interpretation. 2003 IBC and 2006 IBC

Question One: Under the provisions of either the 2003 or 2006 IBC is the ASCE/SEI 7-05 and the CISCA-04 for Seismic Zones 3-4 considered a referenced standard to the 2003 and 2006 editions of the International Building Code?

Answer (Question One): Yes, under both the 2003 and 2006 editions of the International Building Code (IBC) the ASCE/SEI 7 is a referenced standard. In the case of the 2003 edition of the IBC (Page 582) the referenced edition was ASCE/SEI 7-02 (2002 edition) and in the case of the 2006 edition of the IBC (Page 558) the referenced edition was ASCE/SEI 7-05 (2005 edition). In both referenced editions of the ASCE 7 (2002 and 2005) there is further reference to the CISCA standard. In the case of the ACE7-02 the CISCA standard is detailed in Section 9.6.1.1.2 Accepted Standards on Page 159 as “Reference 9.6-17”. In addition, page 163, Section 9.6.2.6.2.2 refers to CISCA and describes the reference further as “(Ref. 9.6-17)” In the 2005 edition of ASCE/SEI 7 the CISCA -04 standard is listed on page 237, under the heading of “Chapter 23” “Seismic Design Reference Documents” (Please note: the 2006 edition of the IBC specifically references the ASCE/SEI 7-05 document with the inclusion of supplement No. 1 and the exclusion of Chapter 14 and Appendix 11A. Therefore Chapter 23 as noted above “Referenced Documents” is included in that portion of the ASCE/SEI 7-05 referenced standard embraced by the 2006 edition of the IBC). As is the case that the ASCE/SEI standard is referenced in both editions (2003 and 2006) of the IBC and it is further the case that the CISCA standard is referenced in both editions (2002 and 2005) of the ASCE/SEI 7 then it is factual that both the ASCE/SEI 7 and the CISCA standards are considered referenced standards of the their perspective 2003 and 2006 editions of the International Building Code.

Question Two: Would provisions found in the CISCA for Seismic Zones 3-4 standard be applicable to projects permitted under the 2003 or 2006 edition of the International Building Code?

Answer (Question Two): Yes, except that the CISCA standard for the 2003 edition of the IBC is CISCA 1991 edition and the CISCA standard for the 2006 edition of the IBC is CISCA 2004 edition. As stated above in Answer One to Question One it is clear that the ASCE/SEI 7 and the CISCA standard are referenced standards to the IBC and as such the provisions found in those standards would be applicable to projects permitted under either edition (2003 or 2006) of the IBC but only to the extent allowed by those standards or codes.

For example, in the case of suspended ceilings and seismic requirements the IBC requirements are determined by IBC Section 1613.1. In section 1613.1 the IBC references and requires direction to the ASCE/SEI 7 where Section 13.5.6 and specifically Section 13.5.6.2.2 for projects in Seismic Design Categories D through F detail the specific requirements. It is important to understand this ordering and reliance on the referenced standards. The IBC, in the body of the code, does not give specific design or installation details but rather relies on the standards to spell out the specifics. In fact, the ASCE/SEI 7 goes on to specify other standards (ASTM 635 and 636), in addition to the referenced CISCA standard, to round out the specifications on how to design and install suspended ceilings in a seismic environment. The ASCE/SEI 7 in addition to specifying the ASTM and CISCA standards goes further to modify the CISCA standards by inclusion of 8 related requirements. This strengthens credibility that the ASCE/SEI 7 is directly referencing the CISCA standard not discarding it. It merely is modifying its use as outlined in the modifications listed on Page 147 of the ASCE/SEI 7-05. Therefore, in order to be found compliant with the provisions of the adopted building code, the IBC, one would be required to seek Section 13.5.6 of the ASCE/SEI 7 and further follow all provisions of Section 13.5.6.2.2 for projects in Seismic Design Categories D through F. This would require and mandate the use of both the ASCE/SEI 7 and CISCA standards as modified by the ASCE/SEI 7.

**Answers submitted by: David W. Cook, Program Manager
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